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09/841,636	04/24/2001	Scott Lee Wellington	5659-03700/EBM	6234

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EXAMINER

MCAVOY, ELLEN M

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1764

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Please find below and/or attached an Office communication concerning this application or proceeding.

48

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/841,636

Filing Date: April 24, 2001

Appellant(s): Wellington et al

Eric B. Meyertons

For Appellant

EXAMINER'S ANSWER

MAILED
MAR 24 2006
GROUP 1700

This is in response to the appeal brief filed 19 December 2005 appealing from the Office action mailed 14 June 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: there are no longer any provisional rejections under the judicially created doctrine of obviousness-type double patenting since copending applications Serial Nos. 09/841,127; 09/841,240; and 09/841,310 have been abandoned since the Final Rejection.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

3,892,270	Lindquist	01 July 1975
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 4429-4448 and 5396-5405 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lindquist.

Lindquist teaches recovering a gaseous product gas containing hydrocarbon values from a hydrocarbon-containing formation (column 1, lines 6-18). Lindquist teaches a method for converting petroleum within an underground formation into combustible product gas and bringing the so-formed gas product to the surface. Thus, hydrocarbons can be recovered from heavy-oil fields by partial oxidation and thermal cracking of the hydrocarbons in situ (column 3, lines 6-8). The product gas is composed of various constituents including carbon monoxide, hydrogen, methane and C₁ to C₁₀ hydrocarbons, as well as carbon dioxide (column 3, lines 46-49). Lindquist teaches that the product gas constituents may be optimized by controlling the ratio of oxidizing gas to steam (column 4, lines 3-4). Table I in Lindquist sets forth a Special Analysis of a California Crude Oil including a sulfur content in weight % and Table II in Lindquist sets forth a condensate sample yield analysis of a typical gas composition containing volume percents of C₃-C₁₂ hydrocarbons, paraffins, naphthenes, olefins and aromatics. The

examiner is of the position that the products produced in Lindquist reasonably appear to be either the same as or an obvious variation of the instantly claimed product(s) because the products of the prior art are also produced from a coal hydrocarbon formation and in a similar way as compared to the claimed product. It has been well-established that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith. In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). See also In re Marosi, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113 where it is stated that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, supra.

Thus the examiner is of the position that in the event any difference can be shown for the product of claims 4429-4448 and 5396-5405, as opposed to the product taught by Lindquist, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results.

Claims 4429-4448 and 5396-5405 also stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

To the extent it could be argued that the claimed composition is novel or unobvious, the claimed subject matter has not be described in the specification in such a way as to enable one skilled in the art to make and/or use the invention, i.e., hydrocarbon formations differ in chemical composition and applicants have not identified the chemical characteristics of the hydrocarbon formation from which the claimed product is derived.

(10) Response to Argument

Appellants argue that Lindquist “does not appear to teach or suggest” claimed features of the recovered hydrocarbon containing composition. “For example, Appellant’s independent claims 4429, 5936 and 5401 all describe features including: ‘wherein greater than about 0.5% by weight of a mixture comprises ammonia’. Lindquist, however, does not appear to teach or suggest the presence of ammonia in product gas constituents.”

The examiner is of the position that the disclosure of Lindquist is not limited to the specific examples of the specification but to what is fairly taught to one of ordinary skill in the art. As noted above, the invention of Lindquist is directed to a method for converting petroleum within an underground formation into combustible product gas and bringing the so-formed

product gas to the Earth's surface for subsequent distribution. Similarly, appellants invention, as set forth on page 10 of the specification, is directed towards hydrocarbons within a hydrocarbon formation (e.g., a formation containing coal, oil shale, heavy hydrocarbons, or a combination thereof) which may be converted in situ within the formation to yield a mixture of relatively high quality hydrocarbon products, hydrogen and other products. Lindquist also teaches that hydrocarbons can be recovered from heavy-oil fields by partial oxidation and thermal cracking of the hydrocarbons in situ, and that the product gas is composed of various constituents including carbon monoxide, hydrogen, methane and C_1 to C_{10} hydrocarbons, as well as carbon dioxide (column 3, lines 46-49). Lindquist teaches that the product gas constituents may be optimized by controlling the ratio of oxidizing gas to steam. Thus the examiner maintains the position that the product of Lindquist reasonably appears to be either the same as or an obvious variation of the instantly claimed product because it may also be produced from a coal hydrocarbon formation and in a similar way as compared to the claimed product. Although ammonia (NH_3) is not specifically set forth in Lindquist, the examiner is of the position that its presence is largely dependent upon the specific underground hydrocarbon-containing formation of coal, oil shale, etc., being treated.

Appellants argue each claim separately and points to claim limitations such as "wherein greater than about 10% by volume at 25°C and one atmosphere absolute pressure of the non-condensable hydrocarbons and H_2 comprises H_2 ", "wherein the non-condensable hydrocarbons further comprise hydrocarbons having carbon numbers of less than 5, and wherein a weight ratio of the hydrocarbons having carbon numbers from 2 through 4 to methane in the mixture is

greater than approximately 1”, “wherein greater than about 0.1% by weight and less than about 15% by weight of the condensable hydrocarbons are olefins”, “wherein a molar ratio of ethene to ethane in the non-condensable hydrocarbons is greater than about 0.001, and wherein a molar ratio of ethene to ethane in the non-condensable hydrocarbons is less than about 0.15”, etc., and argues that Lindquist does not appear to teach or suggest at least the above-quoted features in combination with other features of the claims. This is not deemed to be persuasive since Lindquist teaches olefins, C₁ to C₁₀ hydrocarbons, etc., and the examiner maintains the position that any differences in molar ratios and amounts of these components would have been obvious to one of ordinary skill in the art as a routine modification of the product(s). In the absence of a showing of unexpected results, an obviousness rejection is seen to exist.

In regards to the rejection under 35 U.S.C. 112, second paragraph, appellants argue “that suitable hydrocarbon formations are described at least from line 29 of page 51 through line 13 of page 56 of the Specification.”

Coal formations differ in chemical composition and it would be expected that any fluid obtained from a coal formation would depend on that chemical composition. Thus, to the extent it can be argued that the claimed compositions are novel or unobvious, the claimed subject matter has not been described in the specification in such a way as to enable one skilled in the art to make and/or use the invention, i.e., applicants have not identified the chemical characteristics of the coal formation from which the claimed product is derived. As to pages 51 through 56 of the specification, those pages contain a general description on which a coal formation may be

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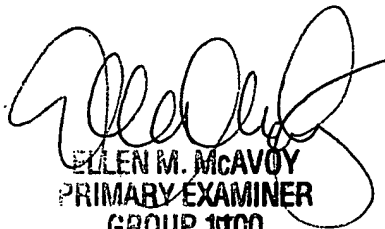
selected (e.g., "richness, thickness and depth"), but fail to teach or disclose the chemical composition of the coal formation required to produce the claimed compositions.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,


ELLEN M. McAVOY
PRIMARY EXAMINER
GROUP 1100

EMcAvoy
March 3, 2006

Conferees:

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